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A comparative analysis of corporate reporting on ethical issues by UK and German chemical and pharmaceutical companies

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ABSTRACT

This paper reports on a study of reporting on ethical issues¹ in the corporate annual reports of the largest UK and German chemical and pharmaceutical companies between 1985 and 1995. The study is both comparative and longitudinal in nature, examining in detail how ethical reporting practices developed differently in two Western nations. Despite the similarity in industry affiliations of the companies in the two samples, the study found substantial differences in the nature and patterns of reporting both across time and between the two countries studied. In particular, German companies reported more information and that reporting 'matured' to its current level at an earlier date. The paper explores some of the factors which might be thought to have caused this diversity in reporting between the two countries including: industry initiatives; extent of regulations demanding ethical responsibility; and other social and political pressures.

1. INTRODUCTION

There is an increasing recognition that large multinational enterprises have an impact on the physical, social, cultural and political environments of the countries in which they operate. There is also both an increasing intolerance of those negative impacts which indicate a lack of corporate ethical responsibility and a call for a more proactive role by companies in ethical (and environmental) matters. This is evidenced by, for example, the growth in the

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number of ethical investment funds, pressure groups and non-government organizations which are concerned with business ethical responsibility. The increase in legislation governing ethical responsibility might also be taken as evidence of this change. In light of these changes in the social and political environment, this study examines the extent of, and patterns in, ethical reporting in the corporate annual reports of UK and German chemical and pharmaceutical companies between 1985 and 1995. The study is thus both longitudinal and comparative in nature, and seeks to show how ethical reporting practices have developed differently in two Western European countries.

The chemical and pharmaceutical industries were selected, first, because of the high profile and diversity of the political and ethical issues facing them and, second, because of the potential magnitude of the environmental impacts of those sectors. The study focused on UK and German companies because of the relatively high level of ethical reporting in these countries (see, for example, Adams *et al.*, 1995, 1998) as well as a desire to extend the European comparative literature. Germany and the UK are also of particular interest because, with regard to financial reporting, Gray (1988) (supported by Gerhardy, 1991) put them at opposite ends of the secrecy versus transparency continuum.

The main ethical issues facing chemical and pharmaceutical companies are very extensive and include: the export of pesticides, other hazardous chemicals and drugs (see Chetley, 1986; Cropper *et al.*, 1992; Hill, 1988; Walls, 1988); the marketing of non-essential drugs and the pricing of those drugs (see Chetley, 1986; Chew *et al.*, 1985; Ethical Consumer, 1994); bribery (see Braithwaite, 1993); labelling and packaging of chemicals and drugs (see Graham, 1989); false billing of governments (see Anonymous, *Diagnostics Intelligence*, 1996, 18(10): 1); and, more recently, genetics research. The political issues which influence ethical conduct include: patent regulations (see Chew *et al.*, 1985; Silverman *et al.*, 1982; Taggart, 1991); regulations covering parallel trade practices (see Burstall and Senior, 1992; Remit Consultants, 1991); the diversity in environmental regulations (Layman, 1992; Lindackers, 1996); health care systems reforms; and government health and drug pricing policies and the implications that such changes have for pharmaceutical companies' sales and prices (see Cassel and Boroch, 1995; Earl-Slater and Bradley, 1996; Ellwood, 1996; George and Hands, 1983; Giaimo, 1995; Silverman *et al.*, 1982; Zweifel and Crivelli, 1996).

In response to pressures on these issues a number of industry associations have developed guidelines regarding corporate accountability, their concern being to counter the industry's negative image. Those representing the chemical industry such as the *Conseil Européen de L'Industrie Chimique* (CEFIC), the International Council of Chemical Associations (ICCA) and the *Verband der Chemischen Industrie* (VCI), are primarily concerned with both the industry's image with regard to environmental performance and also with the increasing environmental regulation (see, for example, their own publications

and websites). With regard to the pharmaceuticals industry, the Association of the British Pharmaceutical Industry (ABPI) and the European Federation of Pharmaceutical Industries' Associations (EFPIA) are concerned with government policy intervention and regulation on a broad range of issues.

The next section of the paper, Section 2, discusses the relevant prior work on ethical reporting and Section 3 the research method and sample selection. In discussing the results in Section 4, we draw out the differences between the UK and German samples and offer an explanation for these country differences in terms of the differing social and political pressures. In our concluding discussion in Section 5, we consider the incompleteness of reporting, the lack of harmonization of reporting regulations in Europe and suggest areas for further research.

2. PRIOR WORK

Whilst there have been a number of studies concerned with the extent of ethical and, particularly, environmental disclosures in recent years, there have been relatively few which have been of either a longitudinal or a comparative nature (for exceptions on a longitudinal nature see Adams and Harte, 1998; Burchell *et al.*, 1985; Gray *et al.*, 1995b; Guthrie and Parker, 1989a, 1989b; Tinker and Neimark, 1987). Comparative studies (that is, those which look at ethical or social information across countries), have looked at short time periods (see, for example, Adams *et al.*, 1995, 1998; Andrew *et al.*, 1989; Belkaoui and Karpik, 1989; Cowen *et al.*, 1987; Guthrie and Parker, 1990; Nees and Mirza, 1991; Roberts, 1990, 1991; Trotman and Bradley, 1981; UN, 1992, 1994). Although these studies provide some evidence of differences in both the amount and the types of disclosures across countries, the extent of these differences is difficult to determine. This is primarily because different characteristics (for example, size and industry composition) of the companies making up the samples from each country in a particular study make such comparisons unreliable. Further, comparison between studies is also difficult because of differences in the time period studied, sample selection and measurement methods used. In addition, the factors which influence these apparent differences in disclosure (including: culture; the extent of regulations demanding ethical responsibility; and the political pressures) generally lack any substantial and/or coherent theoretical basis.

Of the longitudinal studies which have been carried out, the majority have tended to focus on one particular type of disclosure, such as reporting on the employment of women (Adams and Harte, 1998; Tinker and Neimark, 1987) or value-added statements (Burchell *et al.*, 1985). Whilst such work has been important in providing an insight into the influences on a particular type of corporate reporting, it has done so in the context of a single country (see, for example, Gray *et al.*, 1995b) and, in the case of Guthrie and Parker (1989a, 1989b) and Tinker and Neimark (1987), a single company. Consequently,

there seems to be value in undertaking a study which is both comparative and longitudinal.

3. RESEARCH METHOD AND SAMPLE SELECTION

The study covers the period 1985–95 and focuses on all types of ethical reporting. In addition to environmental reporting, this includes reporting on: product marketing and pricing; product safety and testing; community involvement and public welfare; charitable donations and activities; political donations and activities; equal opportunities; and legal proceedings, litigation and liabilities.² This broad definition of ethical reporting is important since most of the recent literature examining the extent and nature of corporate social reporting around the world has focused on environmental reporting (see, for example, Deegan and Gordon, 1996; Gamble *et al.*, 1995, 1996; KPMG, 1993, 1994a, 1994b; Roberts, 1991; United Nations, 1992, 1994). Some exceptions are the work of Adams *et al.* (1995, 1998), Gray *et al.* (1995a) and Hackston and Milne (1996).

The period chosen coincides with a reported rise in the proportion of UK companies disclosing environmental information during the late 1980s and early 1990s (see Gray *et al.*, 1996). In the case of environmental reporting in the largest UK companies, the increase was from an insignificant minority (less than 10%) in 1986 to a significant majority (60%) by 1989, and an increase in the average page length of environmental disclosure over the same period from 0 to 0.30 pages (Gray *et al.*, 1995a). The almost comparable increase in the proportion of UK companies reporting on ‘community’ matters from about 20% to 60% over the same period with an accompanying increase in the average volume of disclosure of 0.05 to 0.45 pages (Gray *et al.*, 1995a) has received much less attention in the literature. The lack of empirical work on social reporting other than environmental reporting is surprising given the significant, recent growth in ethical investment funds.

The sample consisted of all UK and German companies in the chosen industries falling within the top 400 companies in the *Times 1000* in 1995. The UK and German samples represent a significant proportion of the total market capitalization of the chemical and pharmaceutical industries in each country. The companies are listed in Table 1.

The data were collected using content analysis of the corporate annual report. This technique has been widely used in determining the extent and nature of corporate social reporting (see, for example, Adams and Harte, 1998; Adams and Roberts, 1995; Adams *et al.*, 1995, 1998; Gray *et al.*, 1995b; Guthrie, 1982; Guthrie and Mathews, 1985; Guthrie and Parker, 1990). The research instrument used was based on a model developed by Adams *et al.* (1995, 1998). The length of the relevant narrative disclosures was calculated in terms of both the number and proportions of pages (to two decimal points) allowing us to determine the total amount of space devoted to each type of

Table 1 List of sample companies and market capitalization

<i>Name</i>	<i>No. of employees 1995</i>	<i>Market capitalization 1995 (£m)</i>
Imperial Chemical Industries PLC (GBR)	64,800	5,532.0
SmithKline Beecham PLC (GBR)	52,400	18,934.9
Glaxo Holdings PLC (GBR)	54,359	32,065.0
Zeneca Group PLC (GBR)	31,400	11,795.0
The BOC Group (GBR)	40,081	3,840.6
Reckitt & Colman PLC (GBR)	18,739	3,028.9
Wellcome PLC (GBR)	N/A	n.a.
Courtaulds PLC (GBR)	19,000	1,776.0
Harrisons & Crosfield PLC (GBR)	17,232	1,137.6
AAH PLC (GBR)	N/A	n.a.
Fisons PLC (GBR)	10,727	n.a.
Hoechst AG (DE)	165,928	6,690.0
Bayer AG (DE)	142,900	12,015.0
BASF AG (DE)	105,557	8,767.0
Henkel KgaA (DE)	41,728	n.a.
Schering AG (DE)	18,314	2,922.6
Merck (DE)	27,459	1,185.0
Beiersdorf AG (DE)	17,040	n.a.
Andreae-Noris Zahn AG (DE)	2,358	n.a.
Wacker-Chemie GmbH (DE)	13,657	n.a.

Key: GBR = UK; DE = Germany; n.a. = Not applicable; N/A = Not available.

Source: FT Extel (1997), *The Times 1000 1997*. London: Times Books. Corporate annual reports for 1995.

disclosure (see Gray *et al.*, 1995b, who also used this method of measuring the quantity of disclosure, for a critique of the appropriateness of other possible methods).

The content analysis forms were completed, in the first instance, by the second named author who was employed as a research assistant on the project. The first author checked two complete reports from each company in order to establish the validity of the content analysis and coding; and then, for all other reports, read the information in the annual report which was included on the content analysis form as a check upon the coding.

4. RESULTS

The results for environmental reporting and other ethical reporting are considered separately.³

Environmental reporting

Tables 2 and 3 show the mean page lengths devoted to environmental reporting and the number of disclosers of environmental information in each of the

Table 2a Mean page length of environmental reporting by UK companies

<i>Items of environmental reporting</i>	<i>Means for 1985-95</i>											<i>Mean across 11 years</i>
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Policy statements and overview	0.13	0.09	0.17	0.10	0.22	0.13	0.23	0.21	0.30	0.33	0.39	0.21
Political statements, activities concerning environment	0.03	0.00	0.12	0.15	0.11	0.04	0.06	0.08	0.06	0.06	0.03	0.07
Legal proceedings, awards, compliance with standards and legislation	0.03	0.03	0.06	0.03	0.24	0.06	0.12	0.11	0.05	0.12	0.24	0.10
Financial impacts – overview only	0.04	0.00	0.04	0.07	0.16	0.13	0.16	0.09	0.05	0.07	0.04	0.08
Capital investments	0.02	0.00	0.05	0.10	0.18	0.14	0.22	0.07	0.07	0.09	0.06	0.09
Operating and process information including employee safety	0.04	0.07	0.08	0.18	0.09	0.13	0.14	0.24	0.23	0.41	0.24	0.17
Emission levels and natural resource conservation	0.00	0.29	0.00	0.00	0.00	0.30	0.04	0.00	0.06	0.07	0.05	0.07
Research and development	0.00	0.05	0.14	0.29	0.22	0.06	0.08	0.06	0.15	0.04	0.07	0.11
Notes to the accounts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.10	0.08	0.14	0.04
Product range information	0.00	0.00	0.05	0.06	0.22	0.04	0.10	0.00	0.00	0.00	0.14	0.06
Product impact information	0.00	0.00	0.18	0.11	0.32	0.82	0.38	0.21	0.30	0.47	0.16	0.27
Stakeholder involvement in environmental measures	0.00	0.00	0.00	0.00	0.00	0.09	0.08	0.00	0.07	0.21	0.04	0.04
Other areas/information	0.05	0.00	0.00	0.06	0.03	0.10	0.03	0.04	0.00	0.15	0.02	0.04
Environmental reporting	0.34	0.53	0.89	1.15	1.79	2.04	1.64	1.23	1.44	2.10	1.62	1.34

Table 2b Mean page length of environmental reporting by German companies

<i>Items of environmental reporting</i>	<i>Means for 1985–95</i>											<i>Mean across 11 years</i>
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Policy statements and overview	0.59	0.17	0.13	0.22	0.45	0.29	0.20	0.18	0.19	0.35	0.80	0.32
Political statements, activities concerning environment	0.00	0.06	0.05	0.12	0.03	0.00	0.15	0.18	0.09	0.02	0.02	0.06
Legal proceedings, awards, compliance with standards and legislation	0.15	0.07	0.06	0.09	0.13	0.04	0.22	0.08	0.15	0.12	0.05	0.10
Financial impacts – overview only	0.24	0.22	0.25	0.22	0.16	0.09	0.12	0.11	0.19	0.16	0.23	0.18
Capital investments	0.37	0.24	0.74	0.48	0.23	0.96	0.40	0.45	0.70	0.49	0.51	0.50
Operating and process information including employee safety	0.22	0.52	0.32	0.29	0.48	0.49	0.19	0.25	0.40	0.58	0.71	0.40
Emission levels and natural resource conservation	0.12	0.20	0.08	0.12	0.07	0.38	0.18	0.28	0.16	0.16	0.09	0.17
Research and development	0.61	0.51	0.22	0.31	0.56	0.61	0.37	0.21	0.17	0.14	0.30	0.36
Notes to the accounts	0.00	0.06	0.02	0.04	0.04	0.05	0.03	0.02	0.04	0.03	0.02	0.03
Product range information	0.54	0.48	0.20	0.24	0.28	0.18	0.27	0.17	0.16	0.22	0.19	0.26
Product impact information	0.36	0.25	0.31	0.85	1.00	0.94	0.53	0.66	0.64	0.52	0.36	0.58
Stakeholder involvement in environmental measures	0.03	0.06	0.11	0.27	0.17	0.07	0.08	0.26	0.22	0.20	0.18	0.15
Other areas/information	0.15	0.11	0.40	0.93	0.10	0.15	0.07	0.00	0.00	0.00	0.00	0.17
Environmental reporting	3.38	2.95	2.89	4.18	3.70	4.25	2.81	2.85	3.11	2.99	3.46	3.32

Table 3a Proportion of sample reporting of environmental information in the UK

<i>Items of environmental reporting</i>	<i>The proportion of UK companies reporting this item from 1985–95</i>											<i>Disclosing companies (%)</i>
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Policy statements and overview	2/9	2/9	1/10	3/10	3/10	5/10	8/10	5/9	6/10	8/10	6/9	46
Political statements, activities concerning environment	1/9	0/9	1/10	1/10	2/10	1/10	3/10	2/9	2/10	2/10	2/9	16
Legal proceedings, awards, compliance with standards and legislation	2/9	2/9	1/10	1/10	3/10	3/10	3/10	5/9	4/10	6/10	6/9	34
Financial impacts – overview only	1/9	0/9	1/10	2/10	2/10	1/10	1/10	2/9	2/10	2/10	2/9	15
Capital investments	1/9	0/9	2/10	2/10	3/10	2/10	1/10	2/9	2/10	3/10	2/9	19
Operating and process information including employee safety	3/9	3/9	4/10	6/10	6/10	6/10	6/10	4/9	6/10	7/10	6/9	53
Emission levels and natural resource conservation	0/9	1/9	0/10	0/10	0/10	2/10	1/10	0/9	2/10	4/10	3/9	12
Research and development	0/9	1/9	1/10	1/10	2/10	2/10	4/10	2/9	4/10	1/10	2/9	19
Notes to the accounts	0/9	0/9	0/10	0/10	0/10	0/10	0/10	1/9	2/10	2/10	2/9	7
Product range information	0/9	0/9	1/10	1/10	1/10	1/10	2/10	0/9	0/10	0/10	1/9	6
Product impact information	0/9	0/9	1/10	1/10	0/10	1/10	1/10	1/9	2/10	1/10	1/9	12
Stakeholder involvement in environmental measures	0/9	0/9	0/10	0/10	0/10	1/10	3/10	0/9	1/10	1/10	2/9	7
Other areas/information	1/9	0/9	0/10	1/10	1/10	1/10	1/10	1/9	0/10	1/10	1/9	8

Table 3b Proportion of sample reporting of environmental information in Germany

Items of environmental reporting	The proportion of German companies reporting this item from 1985–95											Disclosing companies (%)
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Policy statements and overview	5/7	6/8	7/8	8/8	8/8	7/8	8/8	8/8	7/7	7/8	7/8	91
Political statements, activities concerning environment	0/7	1/8	3/8	1/8	3/8	0/8	2/8	2/8	2/7	1/8	1/8	19
Legal proceedings, awards, compliance with standards and legislation	3/7	5/8	6/8	4/8	4/8	2/8	4/8	5/8	3/7	4/8	5/8	53
Financial impacts – overview only	6/7	7/8	8/8	7/8	8/8	5/8	6/8	7/8	5/7	6/8	7/8	84
Capital investments	7/7	7/8	7/8	7/8	8/8	6/8	8/8	7/8	6/7	6/8	8/8	90
Operating and process information including employee safety	6/7	8/8	7/8	6/8	8/8	7/8	8/8	7/8	7/7	6/8	7/8	90
Emission levels and natural resource conservation	4/7	6/8	5/8	6/8	5/8	2/8	4/8	4/8	2/7	4/8	3/8	52
Research and development	5/7	3/8	7/8	6/8	7/8	7/8	7/8	7/8	6/7	7/8	8/8	81
Notes to the accounts	0/7	2/8	1/8	4/8	4/8	3/8	3/8	3/8	2/7	5/8	3/8	34
Product range information	2/7	3/8	3/8	2/8	1/8	3/8	2/8	2/8	2/7	1/8	2/8	27
Product impact information	2/7	3/8	2/8	1/8	2/8	0/8	0/8	2/8	0/7	0/8	0/8	14
Stakeholder involvement in environmental measures	2/7	3/8	4/8	5/8	4/8	4/8	2/8	4/8	4/7	2/8	4/8	44
Other areas/information	1/7	2/8	2/8	1/8	2/8	1/8	1/8	0/8	0/7	0/8	0/8	12

chosen categories for UK and German companies over the period of the study.⁴ Table 2a shows an increasing mean page length of environmental reporting amongst the UK sample firms from 1985 to 1990 with fluctuations thereafter. The overall mean page length of the UK companies' environmental reporting increased from 0.34 of a page to 1.62 pages during the eleven-year period with a peak of 2.10 pages in 1994. Each of the environmental categories is reported throughout most of the period although 'notes to the accounts' and 'stakeholder involvement in environmental measures' were not reported until the 1990s. The area where most information was reported across the period was 'product impact information' followed by 'policy statements and overview information'. In contrast to the increasing trend in environmental reporting in the UK between 1985 and 1990, Table 2b shows that environmental reporting by German companies fluctuated from year to year and was at a much higher level than for UK companies. This could be interpreted as demonstrating an earlier maturity of German companies with respect to environmental reporting. The lowest mean page length of reporting in the German sample of 2.81 pages in 1991 is higher than the peak of 2.10 pages in 1994 for UK companies. The peak for German companies is 4.25 pages in 1990. The area where most information was reported across the period was again 'product impact information', but this time followed by 'capital investments'. Apart from the areas of 'political statements/activities concerning the environment', 'legal proceedings, awards, compliance with standards and legislation' and 'notes to the accounts' the mean page length of reporting across the eleven years was greater for German companies.

Tables 3a and 3b reveal that, as well as disclosing more, a higher proportion of the German companies report in each of the specific categories of information than the UK disclosing companies. This is particularly the case with regard to information concerning the following: 'policy statements and overview'; 'financial impacts'; 'capital investments'; 'operating, process information, including employee safety'; and 'research and development'. In each of these areas, an average of over 80% of the German sample report in these categories. In contrast none of the mean percentages of disclosing companies in the UK sample exceeded 80%. The highest mean percentage of disclosing companies was 53% for the 'operating, process information, including employee safety' category.

The relative maturity of German environmental reporting is perhaps to be expected given that Germany's environmental regulations are significantly more developed than those of most other European countries and high levies payable where those regulations are contravened. This is noted in BASF's corporate annual report which argues that:

... legislation is becoming increasingly stringent, levies keep on rising, and approval procedures are getting more and more complicated. In terms of the cost involved the additional environmental and safety benefits are relatively slight. The pioneering role that Germany has assumed here thus imposes a heavy burden. ... There was a

time when the legislative background against which the cost effectiveness of a capital project was calculated could be assumed to remain constant over a foreseeable period. Today's conditions often change during the designing and construction of a plant. Realistic planning is therefore becoming increasingly difficult. . . . We do not feel that there is much sense in levies that are unlikely to have an educative effect but use up funds that the company needs for other purposes, including environmental protection.

(BASF, corporate annual report, 1991: 34)

Bayer's chairman too voices his concerns:

Protecting the environment remains a major task. It is our firm intention to make further advances in this area. However, we are becoming increasingly concerned about the direction of environmental policy in Germany. Over the past decade, government regulations have steadily pushed up our capital spending and operating costs for environmental protection facilities. And on top of that, we are now facing increasing environmental levies. . . . This situation seriously threatens our international competitiveness.

(Hermann Strenger, Bayer, corporate annual report, 1991: 7)

Early, relatively comprehensive, reporting by German companies follows early concerns with environmental issues. Early concerns with environmental issues in Germany are noted by Paterson (1991), who argues that in the period 1969–82, the SPD/FDP coalition took environmental concerns more seriously than the government of any other major European state. There was an active environmental movement in the *Bundesländern* since the 1970s although *Die Grünen* (Green Party) was not officially founded until 1980 (Klein and Arzheimer, 1997; Lankowski, 1997). In 1971 the First Environmental Programme was issued by the Brandt government which stressed the *Verursacherprinzip* ('polluter-pays principle') and was modified by the criterion of *Kooperationsprinzip* ('economic responsibility') (see Paterson, 1991). However, much stringent control over environmental issues in Germany was largely introduced by *Die Grünen* when they were elected to the *Bundestag* in 1983 (Bomberg, 1998⁵). This consequently enabled the Greens to use a political platform to put items on the agenda previously neglected by the other established political parties, the main one being their concern over the environment⁶ (Lankowski, 1997; Paterson, 1991; Scharf, 1994). Various taxes and charges, for example higher petrol taxes, an air emissions charge, a packaging charge and waste water charges, were introduced by a *Program zum Umbau der Industriegesellschaft* (Programme for the Reconstruction of Industrial Society) in 1986 (see, for example, Smith, 1995). Of significant importance was the creation of the *Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit* (Environmental Ministry) in June 1986. Prior to these initiatives, most of the government's environmental functions had been carried out by the Interior Ministry. The Chancellor issued a decree creating the Environmental Ministry in order to quell disquiet following heavy criticism for the mis-handling of public information in the aftermath of the Chernobyl accident (Weale *et al.*, 1996).⁷

Political pressures surrounding environmental issues in the UK were not as considerable as those of Germany (see Garner, 1996, for more detail on environmental movement and environmental politics in Britain). Debates on environmental destruction and protection did not come to the fore in the UK until the early 1990s and then only in response to the positive support from voters that the Green Party received in the 1989 European Parliament⁸ (Smith, 1995). As a consequence, the Conservative government announced that they would give higher priority to environmental issues which led to the appointment of Chris Patten as Minister at the Department of the Environment (DOE). Together with his adviser, Professor David Pearce,⁹ he proposed the Environmental Protection Bill and several initiatives encouraging environmental protection were legislated in 1990 indicating the increase in importance of environmental issues (Gray, 1990a, 1990b). During this period the Conservative government initiated a considerable modernization of environmental standards, such as the introduction of new systems of integrated pollution control, waste management, water resource protection and the unification of pollution control functions in the Environment Agency (Bell, 1997). The environmental legislative movement also led to the creation of the Environmental Act 1995 which revised the Environmental Protection Act 1990 and the Water Resources Act 1991 (Waite, 1997). Owing to the Conservatives' preference for voluntary or market/self-regulation on environmental issues, however, this development in environmental law in the UK was relatively ineffective. This preference of the UK government was apparent at the EC level:

... [the UK government] has been strongly opposed to the development of environmental tax policies at the level of the European Community. At an ECOFIN meeting held in the middle of 1992, the UK was the only member state to state unequivocal opposition to the European Commission's proposal for a European carbon tax.

(Smith, 1995: 6)

Further, most (but not all) of the environmental legislation in the UK has been influenced and developed only as a result of EC environmental law (Mumma, 1995; Bell, 1997; Waite, 1997).

The high level of reporting generally in this sector¹⁰ appears to have been encouraged by industry associations. In response to the increasing legislation, the *Conseil Européen de L'Industrie Chimique* (CEFIC) was established to represent the European chemical industry's position on regulation and it aims to achieve deregulation on some issues. The International Council of Chemical Associations (ICCA) oversees Responsible Care which publishes guidelines concerned with health, safety and environmental performance and openness in communication about activities and achievements (Responsible Care, 1998). ICCA's stated aim is to build industry credibility through improved performance and increased communication.¹¹ The *Verband der Chemischen Industrie* (VCI) is the German chemicals industry association which has lobbied the government on a number of environmental issues. For example, in 1975:

... the VCI complained bitterly that in relation to the proposed new *T. A. Luft* [technical instruction on air pollution control] industrial expertise had not been drawn on at an early stage.

(Paterson, 1991: 310)

And in 1979 the VCI established the *Initiative Geschützter Leben* to attempt to influence public opinion (Paterson, 1991). It published a Responsible Care report containing data on the chemical industry's performance in safety, health and the environment (see VCI, 1997).

Given the high level of national regulation concerning the environment, Bayer probably spoke for German companies concerned about the lack of harmonization across Europe when it stated:

And environmental policy must be harmonized internationally in the interests of both industry and the environment.

(Hermann Strenger, Bayer, corporate annual report, 1991: 7)

Whilst European directives and regulations exist to deal with chemical safety and pharmaceutical marketing, registration, pricing and use issues, the lack of harmonization concerning environmental impacts is a serious competitive issue for German companies. For example, in 1991, total environmental costs as a percentage of sales were estimated at more than 9% of sales for Germany's big three, BASF, Hoechst and Bayer, while the comparable figure for ICI, the UK's largest chemical company, was 2.8% (Layman, 1992). The differences in the nature and extent of environmental reporting between the UK and Germany point to a role for EU regulation concerning corporate ethical accountability as well as responsibility. We personally would like to see the minimum base for such regulation as the best practice across the EU on individual issues.

Other ethical reporting

Tables 4a and 4b show the mean page length of other types of ethical reporting¹² both in total and by category. They show that, as with environmental disclosures, there is an increasing trend in the disclosure of other ethical information by UK companies for the first part of the period, whilst in the case of German companies there is a much more varied pattern of disclosure quantity. Most particularly the mean page length of 4.68 pages for the 'charity' category in the German sample for 1988 results from a single disclosing company, namely, Bayer AG.

Tables 5a and 5b show that whilst both UK and German sample companies reveal very little of their ethical business practices information, the proportion of the reporting companies providing information concerning 'political donations, activities, and statements' and 'equal opportunities', is high throughout the years studied in both samples. German companies do, however, devote more space coverage on these issues. In the case of the UK

Table 4a Mean page length of other ethical reporting by UK companies

<i>Items of other ethical reporting</i>	<i>Means for 1985–95</i>											<i>Mean across 11 years</i>
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Ethical business practices	0.07	0.08	0.09	0.08	0.11	0.10	0.09	0.07	0.08	0.00	0.03	0.07
Product policies, safety, testing	0.00	0.00	0.11	0.10	0.00	0.06	0.18	0.29	0.12	0.11	0.08	0.10
Political donations, activities, statements	0.17	0.12	0.17	0.17	0.14	0.24	0.21	0.25	0.43	0.25	0.09	0.20
Charitable, community involvement, public welfare activities, donations	0.09	0.22	0.18	0.35	0.40	0.36	0.74	0.37	0.30	0.22	0.19	0.31
Customer relations and product quality	0.04	0.06	0.19	0.20	0.44	0.23	0.31	0.15	0.35	0.42	0.46	0.26
Equal opportunities	0.12	0.20	0.21	0.14	0.13	0.19	0.18	0.19	0.18	0.16	0.16	0.17
Other ethical reporting	0.49	0.68	0.95	1.04	1.22	1.18	1.71	1.32	1.46	1.16	1.01	1.11

Table 4b Mean page length of other ethical reporting by German companies

<i>Items of other ethical reporting</i>	<i>Means for 1985–95</i>											<i>Mean across 11 years</i>
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Ethical business practices	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.05	0.05	0.11	0.05	0.05
Product policies, safety, testing	1.38	0.07	0.24	0.17	0.17	0.00	0.00	0.06	0.00	0.00	0.00	0.19
Political donations, activities, statements	0.27	0.30	0.25	0.18	0.18	0.33	0.45	0.63	0.73	0.33	0.41	0.37
Charitable, community involvement, public welfare activities, donations	0.07	0.00	0.67	4.68	0.09	0.04	0.08	0.10	0.07	0.22	0.05	0.55
Customer relations and product quality	0.12	0.21	0.20	0.33	0.28	0.21	0.26	0.56	0.25	0.35	0.50	0.30
Equal opportunities	0.15	0.35	0.26	0.30	0.48	0.38	0.28	0.29	0.13	0.18	0.23	0.28
Other ethical reporting	2.04	0.98	1.67	5.70	1.24	1.00	1.12	1.69	1.23	1.19	1.24	1.74

Table 5a Proportion of sample reporting of other ethical information in the UK

<i>Items of other ethical reporting</i>	<i>The proportion of UK companies reporting this item from 1985–95</i>											<i>Disclosing companies (%)</i>
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Ethical business practices	4/9	4/9	4/10	5/10	6/10	6/10	6/10	5/9	5/10	0/10	1/9	41
Product policies, safety, testing	1/9	0/9	1/10	4/10	4/10	2/10	1/10	4/9	4/10	4/10	3/9	26
Political donations, activities, statements	8/9	7/9	9/10	10/10	9/10	10/10	9/10	9/9	8/10	9/10	9/9	92
Charitable, community involvement, public welfare activities, donations	9/9	8/9	9/10	10/10	10/10	10/10	10/10	9/9	10/10	10/10	9/9	98
Customer relations and product quality	4/9	3/9	6/10	6/10	8/10	6/10	5/10	7/9	9/10	9/10	7/9	66
Equal opportunities	8/9	7/9	9/10	9/10	9/10	9/10	8/10	9/9	8/10	9/10	9/9	89

Table 5b Proportion of sample reporting of other ethical information in Germany												
Items of other ethical reporting	The proportion of German companies reporting this item from 1985–95											
	Disclosing companies (%)											
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Ethical business practices	1/7	1/8	1/8	2/8	1/8	1/8	1/8	1/8	1/7	2/8	1/8	15
Product policies, safety, testing	6/7	6/8	7/8	7/8	6/8	6/8	8/8	7/8	6/7	7/8	7/8	85
Political donations, activities, statements	7/7	8/8	8/8	8/8	6/8	7/8	8/8	8/8	7/7	8/8	7/8	95
Charitable, community involvement, public welfare activities, donations	1/7	0/8	1/8	1/8	1/8	3/8	1/8	1/8	2/7	5/8	3/8	22
Customer relations and product quality	4/7	8/8	8/8	7/8	8/8	5/8	8/8	5/8	7/7	8/8	8/8	88
Equal opportunities	6/7	6/8	8/8	8/8	7/8	6/8	6/8	6/8	6/7	7/8	5/8	83

sample, disclosure of corporate ethical impacts is generally limited to the mandatory requirements to disclose charitable donations (Companies Act 1989, Sch. 7, s. 234) political donations (Companies Act 1985, Sch. 7) and policy with respect to the employment of the disabled (Companies Act 1985, Sch. 7, s. 234(4)). (See Adams and Harte, 1999.) Tables 5a and 5b also highlight some further differences between the two samples. Whilst the majority (an average of 85%) of German companies reported on their 'product policies, safety and testing', only 26% on average of the UK companies offer this information. On the other hand, almost all (98% on average) UK companies disclosed in the 'charitable, community involvement, public welfare activities and donations' category, whilst coverage here is minimal (22% on average) in the German annual reports. Given that ethical reporting other than environmental reporting is not influenced in either country by extensive regulation concerned with corporate responsibility at the national level, except perhaps on the issue of equal opportunities and donations to charity, we did not expect significant differences between the UK and German samples, other than a tendency by German companies to report more quantified information (following Adams *et al.*, 1995, 1998). Indeed, with regard to 'customer relations and product quality' disclosure, the UK and German samples show similarly increasing volume of disclosures over the years. Amongst the other ethical reporting categories, 'product policies, safety, and testing' in the UK and other 'ethical business practices' in Germany, are the least disclosed items in terms of number of disclosing companies, and when they *are* disclosed the volume of disclosure is very low.

Given the number of ethical issues facing the pharmaceutical industry, the low volume and incidence of reporting here warrants attention. There is a high-level public concern about these industries and a number of organizations campaigning to improve ethical conduct and accountability. For example, *Buko Pharma-Kampagne* is a German organization particularly concerned with the export of drugs to the Third World. It publishes a regular newsletter, *BUKO Pharma-Brief*, which is a campaigning tool and provides information on new developments and specific drugs. In addition it published an article by Hartog and Schulte-Sasse (1993) which called for a statutory export ban on questionable drugs. BUKO Pharma-Kampagne (1988) contains the proceedings of a conference concerned with the number of drugs available and the link to the quality of health care.

The World Health Organization (WHO) published an Essential Drugs Policy in 1981 which lists around 250 drugs considered to be the most essential in response to, and consistent with, the claim that an estimated 70% of drugs on the global market are inessential and/or undesirable (Fattorusso, 1983). Health Action International (HAI) is an informal network of around 150 consumer, health, development action and other public interest groups involved in health and pharmaceutical issues in seventy countries around the world. It has been primarily concerned with promoting the essential drugs

concept, campaigns leading to the regulatory banning of specific harmful drugs and the improvement of advertising standards (see Arundel *et al.*, 1991; Health Action International (HAI), undated). In addition, Consumers International (formerly the International Organization of Consumers Unions) has published a number of briefing papers, some with the Pesticides Trust (which co-ordinates the Pesticide Action Network) and the World Wide Fund for Nature concerned with controlling toxic chemicals, persistent organic pollutants, prior informed consent procedures¹³ and chemical safety (see, for example, IOCU, 1994; CI, 1997). The Food and Agricultural Organization of the United Nations has also been active in the field and issued its *International Code of Conduct on the Distribution and Use of Pesticides* in 1986 whilst the United Nations Environment Programme (UNEP) has broad concerns covering natural resources, human health and well-being, sustainable production and globalization of the environment.

That there is a need for such organizations is supported by media reports and the literature, but not at all apparent from corporate annual reports which remain silent on most of these issues. Such issues would, most appropriately, be covered as policies regarding ethical business practices, political statements or as examples of poor performance which the company was seeking to remedy. There were few examples of the latter type of reporting. The relevant categories of this type of information were 'ethical business practices' and 'political donations, activities and statements'. In fact, reporting of such issues is largely restricted to a few comments on regulatory interventions making the corporate and industry case and matters affecting corporate profitability:

If, as is planned, the reference price system were extended to active ingredients still protected by patents, we would find it even more difficult to finance pharmaceutical research in West Germany. Bayer is therefore supporting the efforts of the Commission of the European Communities to extend the life of patents so they are valid for 15 years after drugs are commercialized.

(Bayer, corporate annual report, 1989: 34)

Another notable feature of the industry is the influence exerted by public authorities over its activities. Thus, they regulate its research and clinical trials, the registration and marketing of its products and the protection afforded by its patents, whilst their decisions on reimbursement, pricing and prescribing influence the demand for its products in public health-care services.

(GlaxoWellcome, corporate annual report, 1989: 10)

While re-imports showed a slight tendency to decrease, suppliers of generics were able to improve their share of the market substantially. Generally speaking, competition increased severely. Further advances by imitators cut significantly into the market shares of companies that do their own research, causing them to forfeit both sales and earnings.

(Merck, corporate annual report, 1987: 13)

Genetic engineering . . . on account of the uncertainty about legislation in the Federal

Republic of Germany, we reconsidered our choice of site and decided on the United States ...

(BASF, corporate annual report, 1988: 6)

Industry associations also safeguard the interests of the pharmaceuticals industry. The Association of the British Pharmaceutical Industry (ABPI), established in 1993, has published a code of practice for the pharmaceutical industry covering issues such as marketing, promotional materials, the provision of information and gifts and inducements (ABPI, 1996). The European Federation of Pharmaceutical Industries' Associations (EFPIA) is a federation of European industry associations representing the industry in Europe. It has produced its own policy agenda specifically referring to government policy interventions (EFPIA, 1996) and a guide to EC rules concerning medicines including directives on the advertising, registration, pricing and use of medicines (EFPIA, 1994). Yet these industry associations have made no call for disclosures on these issues in corporate annual reports.

5. CONCLUDING DISCUSSION

Whilst both the incidence and volume of ethical reporting of UK companies has increased during the first part of our eleven-year period, reporting by German companies appears to have reached its more 'mature' level prior to 1985 when our study began. The proportion of German companies reporting environmental information and the mean volume of such reporting is consistently greater for most types of environmental reporting throughout the period. A similar, but less significant, difference applied to other types of ethical reporting with the exception of 'ethical business practices' up until 1989.

Since German environmental regulations require information to be available to the public, there is little additional cost to German companies of providing this information on environmental impacts in the annual report, and in fact, given apparently greater public concern for environmental issues, as evidenced by the composition of the elected government, there may even be image benefits to companies of doing so. The cost to German companies is the financial burden of complying with regulations concerning environmental impacts. The lower volume of environmental reporting by UK companies is perhaps not surprising since there is no UK legislation requiring such. The European Directive on Freedom of Environmental Information (Directive 90/313/EEC of 7 June 1990) does not apply to private enterprises (see Jewell and Steele, 1998). Legislation covering disclosure of other ethical issues is limited and requires only minimal disclosure.

The impact of the lack of harmonization of regulations concerned with both ethical responsibility and accountability on the ability of the European Union to meet its stated objectives of the free movement of goods, labour and capital is worthy of further examination. As later work from this project will

further show, many German companies argue that the current diversity in regulations is a serious threat to their competitiveness. Whilst they are concerned to reduce German regulation through voluntary reporting initiatives, we would argue that, in the interests of the broader stakeholder community, the preferred way forward is European harmonization with current best practice as a minimum requirement (see Adams, 1999a).

In a different vein, Gray's (1988) paper linking four accounting/reporting values (professionalism versus statutory control, uniformity versus flexibility, conservatism versus optimism and secrecy versus transparency) to Hofstede's (1984) four cultural values put Germanic and Anglo accounting systems at the opposite ends of the secrecy versus transparency continuum, with German systems deemed to be the most secret. Gray argues that:

A preference for secrecy is consistent with strong uncertainty avoidance following a need to restrict information disclosures so as to avoid conflict and competition and to preserve security.

(Gray, 1988: 11)

Whilst Gerhardy (1991) supports Gray's analysis of Germanic reporting as secretive in the case of financial reporting, the results of this study show that Germany is clearly not more secretive than UK companies with regard to ethical reporting. This anomaly is worthy of further consideration and future research could be directed at investigating the differing contexts surrounding financial and ethical disclosures in Germany.

Further work in progress (Adams, 1999b) is focusing on the comprehensiveness of reporting. Newspapers and industry-specific journals provide evidence of the incompleteness of reporting and give a very different picture of the ethical performance of both the industry and individual companies from that gleaned from the corporate annual reports. A few examples of issues reported in the press but not in corporate annual reports include the offering of gifts and incentives to doctors to help market products by Smith Kline Beecham (*Chemical Marketing Reporter*, 1991, 240(12): 24), ICI (Sweet, 1997) and Bayer (*Financial Times*, 1988, 30,454: 8) whilst Glaxo Wellcome has also been accused of other forms of unethical marketing practices (*Chemical Marketing Reporter*, 1986, 230(2): 9; *Greenpeace Business*, 1993, 14: 4–5; International Organization of Consumers Unions, 1993). Bayer has further been accused of the selling of dangerous pesticides to lesser developed countries by Ecosystems Ltd (1992) and has paid out a settlement following charges that it had sold improperly labelled pesticides abroad (Mattera, 1992). During 1989 Bayer was being investigated for alleged violation of German export laws following accusations that it supplied Iran with equipment for the manufacture of chemical weapons (*La Tribune de l'Expansion*, 1989, 1313: 14). In 1993 ICI was to be taken to court by Greenpeace for illegally discharging pollutants not covered by consents (*New Scientist – UK Edition*, 1993, 138(1872): 11). We offer these examples, not as a complete list,

but rather as an unedited sample of issues selected at random to give a flavour of a very different account of the ethical behaviour of chemical and pharmaceutical industries. On checking the annual reports of the companies mentioned here in the year the incident was reported in the press as well as both the preceding and following year, none of these issues were found to be reported.

Our literature review points to the possibility that a number of industry-specific factors including industry–government relations, culture, political pressure groups and the responses of industry associations have contributed to diversity in reporting patterns. Yet our brief examination of issues covered in the media point to a very incomplete and selective corporate reporting. Later work from this project will develop these issues further and report on interviews with some British and German chemical and pharmaceutical companies thus providing a corporate perspective on the reasons for the nature and extent of reporting patterns and the influence of the various environmental variables (Adams, 1999a, 1999b).

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NOTES

- 1 The term 'ethical issues' includes those factors which are used by ethical investment funds, including environmental reporting to form an opinion on the appropriateness of an organization's ethical business practices (see Harte *et al.*, 1991; Rockness and Williams, 1988). For clarification, the term 'social reporting' is generally considered to mean more than this and in particular generally includes *all* reporting concerning employees.
- 2 In addition to those factors used by ethical investment funds (see note 1), this list includes any other ethical issue which was referred to in our sample of corporate annual reports and those used in the Adams *et al.* (1995) and (1998) studies. See Tables 2 to 5 for a complete list of items included.
- 3 This is because environmental reporting is by far the most extensive of the ethical issues considered and covers several different categories.
- 4 In interpreting these data it should be noted that the mean length of the annual report excluding the financial statements is 22.5 and 20.3 pages for the UK and German samples respectively.
- 5 For a more detailed discussion of the Green movement in West Germany see Klein and Arzheimer (1997), Papadakis (1984) and Scharf (1994), and see Pogutke (1998) for a discussion of the development of the Greens in East Germany.
- 6 Petra Kelly was particularly well known as one of the Green movement leaders in

West Germany within the Green Party whose main concerns included poverty, environmental degradation and nuclear policy (Parkin, 1994).

- 7 This political pressure was felt mostly by the SPD. Following this development, the SPD's electoral strategy was very concerned with attempting to win Green voters back to the SPD by pointing to more stringent environmental regulation in German industry (Paterson, 1991). After the unification of Germany in November 1989, however, the Greens were completely eliminated from the *Bundestag* in the 1990 elections due to the economic policies after unification which occupied the legislative agenda and environmental issues were no longer the central theme (Parkin, 1994).
- 8 The environmental agenda of the Green Party had never been positively supported in the UK prior to the 1989 European elections (Smith, 1995). This political support was, however, short-lived, coinciding with the decline in political significance of the German Green Party.
- 9 See Pearce *et al.* (1989, 1991) for blueprints for proposals for a global green economy.
- 10 Compare reporting levels in this study with Adams *et al.* (1995) who found that the mean page lengths of reporting in the 1992 annual reports of the twenty-five largest German and UK companies were 1.61 and 0.59 respectively for environmental disclosure, 3.36 and 2.04 for employee disclosures, and 0.93 and 0.81 for 'other ethical' disclosures.
- 11 However, Gunningham (1995), in appraising the effectiveness of Responsible Care as a self-regulatory body, concludes that it is seriously flawed and suggests a co-regulatory scheme with government with a range of third-party oversight mechanisms.
- 12 See note 2 above.
- 13 Prior informed consent (PIC) is a system of exchanging information about banned or severely restricted chemicals in order that governments can inform exporters. (See the United States Environmental Protection Agency's website at <http://www.epa.gov/oppead1/international/pic.htm>)

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